

FORM PTO-1449 (Modified)	ATTY. DOCKET NO. 24736-2001D (formerly 7352-2001D)	SERIAL NO. 08/786,988
	APPLICANT LITTLE et al.	
	FILING DATE January 23, 1997	GROUP 1743

LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION DISCLOSURE
STATEMENT

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUB CLASS	FILING DATE
L.C.	A	5	0	7	7	2	1	0	12/31/91	Eigler et al	435	176	01/13/89

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUB CLASS	Translation	
L.C.	B	2	0	1	7	1	0	5	03/20/79	UK	—	—		
	C	8	9	1	1	2	7	0	11/30/89	PCT	--	--		
	D	9	0	0	1	5	6	4	02/22/90	PCT	--	--		
	E	9	2	0	7	8	7	9	05/14/92	PCT	--	--		
	F	9	5	0	4	5	2	4	02/16/95	PCT	--	--		

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

L.C.	G	Arshady, Reza, Beaded polymer supports and gels: I. Manufacturing techniques, <u>Journal of Chromatography</u> , 586:181-197 (1991).
	H	Arshady, Reza, Beaded polymer supports and gels: II. Physico-chemical criteria and functionalization, <u>Journal of Chromatography</u> , 586:199-219 (1991).
	I	Batista-Viera et al., A new method for reversible immobilization of thiol biomolecules bsd on solid-phase bound thiolsulfonate groups, <u>App. Biochem and Biotech</u> , 31:175-195 (1991).
	J	English version of Japanese Patent, JP63230086 A 880926 DW8844, WPI/Derwent, AN88-311964, Carry immobilise physiological active substance comprise bind chain form di sulphide compound epoxy group latex contain polymer particle.
	K	English version of Japanese Patent, JP2215399 A 90028 DW9040, WPI/Derwent, AN90-302767, Method detect DNA de single strand combination DNA prime correspond base sequence forming replica.
	L	Hayashi et al., Immobilization of thiol proteases onto porous poly(vinyl alcohol) beads, <u>Polymer Journal</u> , 25:5, 489-497 (1993).

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1.1	AB	3	8	0	7	2	3	5	04/30/74	Lefkovitz	73	863.32	
	AC	4	4	6	1	3	2	8	07/24/84	Kenney	422	100	
	AD	4	7	2	5	6	7	7	02/16/88	Köster <i>et al.</i>	536	27	08/10/84
	AE	4	7	7	9	4	6	7	10/25/88	Rainin <i>et al.</i>	73	863.32	
	AF	4	7	9	8	7	0	6	01/17/89	Brigati	422	102	03/31/87
	AG	4	9	4	8	4	4	2	08/14/90	Manns	156	73.1	06/18/85
	AH	5	0	2	3	1	8	7	06/11/91	Koebler <i>et al.</i>	436	180	03/15/88
	AI	5	0	4	5	6	9	4	09/03/91	Beavis <i>et al.</i>	250	287	09/27/89
	AJ	5	2	1	0	4	1	2	05/11/93	Levis <i>et al.</i>	250	288	01/31/91
	AK	5	2	8	8	6	4	4	02/22/94	Beavis <i>et al.</i>	436	94	11/13/92
	AL	5	3	1	2	2	3	3	05/17/94	Tanny <i>et al.</i>	417	316	02/25/93
	AM	5	4	5	7	0	4	1	10/10/95	Ginaven <i>et al.</i>	435	172.1	03/25/94
	AN	5	5	0	3	9	8	0	04/02/96	Cantor	435	6	10/17/94
	AO	5	5	4	7	8	3	5	08/20/96	Köster <i>et al.</i>	435	6	01/06/94
	AP	5	5	8	0	7	3	3	12/03/96	Levis <i>et al.</i>	435	6	09/06/94
	AQ	5	6	0	5	7	9	8	02/25/97	Köster <i>et al.</i>	435	6	03/17/95
	AR	5	6	2	2	8	2	4	04/22/97	Köster <i>et al.</i>	435	6	02/10/95
	AS	5	6	7	0	3	8	1	09/23/97	Jou <i>et al.</i>	436	518	05/08/95
	AT	5	6	9	1	1	4	1	11/25/97	Köster <i>et al.</i>	435	6	06/06/95
	AU	5	7	4	6	3	7	3	05/05/98	Sanada	239	102.2	02/21/96
	AV	5	7	5	7	3	9	2	05/26/98	Zhang	347	14	02/09/96
	AW	5	8	0	7	5	2	2	09/15/98	Brown <i>et al.</i>	422	50	06/07/95

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													Yes	No
1.1.	AX	0	2	6	8	2	3	7	05/25/88	EP B1	--	--		
	AY	0	3	3	9	7	8	1	11/02/89	EP	--	--		
	AZ	0	5	0	0	5	0	6	08/26/92	EP	--	--		
	BA	8	2	9	0	3	7	7	11/05/96	JP	--	--		X*
	BB	8	4	0	2	5	7	9	07/05/84	PCT	--	--		
	BC	8	9	0	9	4	0	6	10/05/89	PCT	--	--		X*
	BD	8	9	1	2	6	9	4	12/28/89	PCT	--	--		
	BE	9	2	1	3	6	2	9	08/20/92	PCT	--	--		
	BF	9	3	0	9	6	6	8	05/27/93	PCT	--	--		
	BG	9	4	1	1	5	3	0	05/26/94	PCT	--	--		
	BH	9	4	1	1	7	3	5	05/26/94	PCT	--	--		
	BI	9	4	1	6	1	0	1	07/21/94	PCT	--	--		
	BJ	9	4	2	1	8	2	2	09/29/94	PCT	--	--		
	BK	9	5	1	3	5	3	8	05/18/95	PCT	--	--		
	BL	9	6	2	9	4	3	1	09/26/96	PCT	--	--		
	BM	9	6	3	2	5	0	4	10/17/96	PCT	--	--		
	BN	9	6	3	6	7	3	1	11/21/96	PCT	--	--		
	BO	9	7	0	8	3	0	6	03/06/97	PCT	--	--		
	BP	9	7	1	6	6	9	9	05/09/97	PCT	--	--		
	BQ	9	7	3	3	0	0	0	09/12/97	PCT	--	--		
	BR	9	7	4	2	3	4	8	11/13/97	PCT	--	--		
	BS	9	7	4	3	6	1	7	11/20/97	PCT	--	--		
	BT	9	8	1	2	3	5	5	03/26/98	PCT	--	--		
	BU	9	8	2	0	1	6	6	05/14/98	PCT	--	--		

*Derwent English Language Abstract Provided.

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L.C.	BV	"SEQUENOM Signs Agreement With Bruker-Franzen Analytik to Develop Mass Spectrometer for DNA Massarray Analysis", Press Release: Jan. 12, 1998, http://www.sequenom.com/pressrelease.htm .
	BW	"SEQUENOM Uses DNA MassArray™ to Sequence Section of Human Cancer-Related p53 Gene", Press Release: Mar. 27, 1998, http://www.sequenom.com/pressrelease.htm .
	BX	"SEQUENOM Reports DNA MassArray™ Technology More Sensitive Than Electrophoretic Methods in Detecting Gene Mutations: Automated DNA Analysis System Can Speed Up Microsatellite Analyses", Press Release: Dec. 15, 1997, http://www.sequenom.com/pressrelease.htm .
	BY	"SEQUENOM Reports On Use of Its DNA MassArray™ Technology to Analyze Genes Associated with Alzheimer's Disease and Arteriosclerosis: Technology Has Applications in Drug Development", Press Release: Sept. 22, 1997, http://www.sequenom.com/pressrelease.htm .
	BZ	"SEQUENOM Advances the Industrial Genomics Revolution with the Launch of Its DNA MassArray™ Automated Process Line", Press Release: Sept. 28, 1998, http://www.sequenom.com/pressrelease.htm .
	CA	Braun <i>et al.</i> , "Improved Analysis of Microsatellites Using Mass Spectrometry", <u>Genomics</u> 46:18-23 (1997).
	CB	Chrisey <i>et al.</i> , Covalent attachment of synthetic DNA to self-assembled monolayer films, <u>Nucl. Acids Res.</u> 24:3031-3039 (1996).
	CC	Chrisey <i>et al.</i> , Fabrication of patterned DNA surfaces, <u>Nucl. Acids. Res.</u> 24:3040-3047 (1996)
	CD	Church <i>et al.</i> , "Multiplex DNA Sequencing", <u>Science</u> 240:185-188 (1988).
	CE	Crain, "Mass spectrometric techniques in nucleic acid research", <u>Mass Spectr. Rev.</u> 9:505-554 (1990).
	CF	Database WPI, Derwent Publications #198942, citing International PCT Application No. WO 89/09406 published 10/05/89
	CG	Database WPI, Derwent Publications #199703, citing Japanese Patent No. 8290377 published 11/05/96
	CH	Greene and Wuts, <u>Protective Groups in Organic Synthesis</u> , 2nd Edition, Wiley & Sons (1991)

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1.6	CI	Hillenkamp and Ehring, Laser desorption mass spectrometry Part 1: Basic mechanisms and techniques, <u>Mass Spectrometry in the Biological Sciences: A tutorial</u> , pp. 165-179 (1992)
	CJ	Hillenkamp <i>et al.</i> , Matrix assisted UV-laser desorption/ionization: A new approach to mass spectrometry of large biomolecules, <u>Bio mass Spectr.</u> , Burlingame and McCloskey (eds.), pp. 49-61, Elsevier Science Publishers B.V., Amsterdam (1989).
	CK	Jett <i>et al.</i> , "High-Speed DNA Sequencing: An Approach Based Upon fluorescence Detection of Single Molecules", <u>J. Bio Struct & Dynam.</u> 7(2):301-09 (1989).
	CL	Köster <i>et al.</i> , N-acyl protecting groups for deoxynucleotides: A quantitative and comparative study, <u>Tetrahedron</u> 37:363-369 (1981)
	CM	Köster <i>et al.</i> Oligonucleotide synthesis and multiplex DNA sequencing using chemiluminescent detection, <u>Nucl. Acids Res.</u> , Symposium Series No. 24:318-321, (1991)
	CN	Köster <i>et al.</i> , "Well-Defined Insoluble Primers for the Enzymatic Synthesis of Oligo- and Polynucleotides", <u>Hoppe-Seyler's Z. Physiol. Chem.</u> 359:1579-1589 (1978).
	CO	Köster <i>et al.</i> , "A strategy for rapid and efficient DNA sequencing by mass spectrometry", <u>Nature Bio</u> 14:1123-1128 (1996).
	CP	Landegren <i>et al.</i> , "DNA Diagnostics - Molecular techniques and automation", <u>Science</u> 242:229-237 (1988)
	CQ	Li <i>et al.</i> , "Analysis of single mammalian cell lysates by mass spectrometry", <u>J. Am. Chem. Soc.</u> 118:11662-11663 (1996)
	CR	Li <i>et al.</i> , "High-Resolution MALDI Fourier Transform Mass Spectrometry of Oligonucleotides", <u>Anal Chem</u> 68(13):2090-2096 (1996).
	CS	Little <i>et al.</i> , "Mass spectrometry from miniaturized arrays for full comparative DNA analysis", <u>Nature Med</u> 3(12):1413-1416 (1997).
	CT	Little <i>et al.</i> , "MALDI on a Chip: Analysis of Arrays of Low-Femtomole to Subfemtomole Quantities of Synthetic Oligonucleotides and DNA Diagnostic Products Dispensed by a Piezoelectric Pipet", <u>Anal chem</u> 69:4540-4546 (1997).
	CU	Little <i>et al.</i> , "Direct detection of synthetic and biologically generated double-stranded DNA by MALDI-TOF MS", <u>J. Mass Spec</u> 17:1-8 (1997).
	CV	Martin, "New technologies for large-genome sequencing", <u>Genome</u> 31:1073-1080 (1989).

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1.6	CW	McCray and Trentham, "Properties and uses of photoreactive caged compounds", <u>Annu. Rev. Biophys. Biophys. Chem.</u> 18:239-270 (1989)
	CX	Moini <i>et al.</i> , "A moving belt device to couple high-performance liquid chromatography and chemical reaction interface mass spectrometry", <u>Bio Mass Spect</u> 20:308-312 (1991).
	CY	Nelson <i>et al.</i> , "Volatilization of high molecular weight DNA by pulsed laser ablation of frozen aqueous solutions", <u>Science</u> 246:1585-1587 (1989).
	CZ	Nelson <i>et al.</i> , Time-of-flight mass spectrometry of nucleic acids by laser ablation and ionization from a frozen aqueous matrix, <u>Rapid Communications in Mass Spectrometry</u> 4:348-351 (1990)
	DA	Nordhoff <i>et al.</i> , "Ion stability of nucleic acids in infrared matrix-assisted laser desorption/ionization mass spectrometry", <u>Nuc Acids Res.</u> 21(15):3347-3357 (1993).
	DB	Nordoff <i>et al.</i> , "Matrix-assisted laser desorption/ionization mass spectrometry of nucleic acids with wavelenght in the ultraviolet and infrared", <u>Rapid Comm. Mass Spectrom.</u> 6:771-776 (1992)
	DC	O'Donnell <i>et al.</i> , "MassArray as an enabling technology for the industrial-scale analysis of DNA", <u>Genetic Engineering News</u> 17(21) (1997).
	DD	O'Donnell <i>et al.</i> , "High-Density, Covalent Attachment of DNA to Silioen Wafers for Analysis by MALDI-TOF Mass Spectrometry", <u>Analytical Chemistry</u> 69(13):2438-2443 (1997).
	DE	O'Donnell-Maloney <i>et al.</i> , "Microfabrication and array technologies for DNA sequencing and diagnostics", <u>Genetic Analysis: Biomolecular Engineering</u> 13:151-157 (1996).
	DF	Overberg <i>et al.</i> , "Laser desorption mass spectrometry: part II performance and applications of matrix-assisted laser desorption/ionization of large biomolecules", <u>Mass Spect in the Biolog Science: A Tutorial</u> 181-197 (1992).
	DG	Rolfs <i>et al.</i> , <u>PCR: Clinical Diagnostics and Research</u> , Springer-Verlag (1994)
	DH	Ruppert <i>et al.</i> , "Preparation of plasmid DNA as Sequencing Templates in a Microtiter Plate Format", Paper presented, Cold Spring Harbor Laboratory.
	DI	Ruppert <i>et al.</i> , "A rapid and high throughput method for plasmid isolations", Presented: Automation in Mapping and DNA Sequencing Conference, Aug. 31 - Sept. 2 1994
	DJ	Schram, Karl H., "Mass spectrometry of nucleic acid components", <u>Bio Appl of Mass Spect.</u> 34:203-287 (1990).

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1.6	DK	Shaler <i>et al.</i> , "Effect of Impurities on the matrix-Assisted Laser Desorption Mass Spectra of Single-Stranded Oligodeoxynucleotides", <u>Anal. Chem.</u> 68 :576-579 (1996).
	DL	Siuzdak, Gary, "The emergence of mass spectrometry in biochemical research", <u>Proc. natl. Acad. Sci. USA</u> 91 :11290-11297 (1994).
	DM	Smith R. D., "New developments in biochemical mass spectrometry: Electrospray Ionization", <u>Anal. Chem.</u> 62 :882-899 (1990).
	DN	Smith, Cassandra L., "cDNA Fingerprinting of Breast Cancer Tumor Cells", Boston Univ., MA (1996).
	DO	Tang <i>et al.</i> , "Matrix-assisted laser desorption/ionization mass spectrometry of immobilized duplex DNA probes", <u>Nucleic Acids Research</u> 23 :3126-3131 (1995).
	DP	Tomer <i>et al.</i> , "Coaxial Continuous Flow Fast Atom Bombardment for Higher-Molecular-Weight Peptides: Comparison with Static Fast Atom Bombardment and electrospray Ionization", <u>Bio Mass Spect</u> 20 :783-788 (1991).
	DQ	Trainor, "DNA Sequencing, Automation, and the Human Genome", <u>Anal. Chem.</u> 62 :418-426 (1990).
	DR	Valaskovic <i>et al.</i> , "Attomole protein characterization by capillary electrophoresis-mass spectrometry", <u>Science</u> 273 :1199-1202 (1996)
	DS	Williams, Time of flight mass spectrometry of DNA laser-ablated from frozen aqueous solutions: applications to the Human Genome Project, <u>Intl. J. Mass Spectrom. and Ion Processes</u> 131 :335-344 (1994)
	DT	Wu <i>et al.</i> , "Matrix-assisted Laser Desorption Time-of-flight Mass Spectrometry of Oligonucleotides Using 3-Hydroxypicolinic Acid as an Ultraviolet-sensitive Matrix", <u>Rapid Comm Mass Spec</u> 7 :142-146 (1993).
	DU	Wu <i>et al.</i> , "Time-of-Flight Mass Spectrometry of Underivatized Single-Stranded DNA Oligomers by Matrix-Assisted Laser Desorption", <u>Anal. Chem.</u> 66 :1637-1645 (1994).

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